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COMMON-SCHOOL TEACHING

KIDDLE

COMMON-SCHOOL TEACHING

—A LECTURE—

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BY

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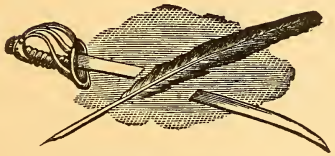

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COMMON-SCHOOL TEACHING.

I design to illustrate, in the remarks which I am about to offer this afternoon, to what an extent, and for what reasons, the profession in which you are engaged deserves your most careful and earnest study. I have chosen as my theme *Common-School Teaching*, because it is in that field that most of you are engaged, and because the teaching of great and heterogeneous masses of children in common schools requires a peculiarly careful application of just principles in order to make it truly effective. Of course, what I have to say has reference to *primary*, as distinguished from *secondary* and *superior*, instruction. It is true, the line of demarcation between these grades is by no means fixed at present; and there is still much discussion in regard to what should be embraced within the scope of common-school instruction; hence, as I do not intend at this time to touch on this discussion, I shall speak of *teaching*, meaning *common-school teaching*, or elementary instruction, leaving its precise limits still undefined.

What we, as educators, need is to impress upon the community the fact that teachers are members of a separate profession; for there is scarcely any error so prolific of evil, and which so utterly ignores the results of modern thought and discovery, as that of believing education, and, of course, teaching, to require no special study in order that it may be understood and practiced. This error, notwithstanding all that has been said and written on the theory and science of education, is, however, often committed, and not simply as one of speculation, but of practice. Some of our systems

of common-school education seem based upon the idea that no such science exists, and that to teach is an intuitive art, the teacher, like the poet, being "born not made;" and, therefore, that those who have acquired a sufficient familiarity with the ordinary school branches, if they possess the requisite *natural* ability, can teach to perfection; while, if they have not that ability, no kind of instruction, nor any amount of study, can make them teachers.—The result of this erroneous impression is, that often no adequate means are provided for the training of those who are intrusted with the most responsible, difficult, and trying of all the duties that devolve upon mankind,—the education of the young.*—Who shall attempt to estimate the baneful consequences of this misconception, when it permeates a vast system which is designed to provide instruction for thousands of youthful minds?

It is consolatory, however, to know that it is an error which, in the main, belongs to the past. Education is now very generally considered a special department of human knowledge. The old ideas have been thoroughly exploded. The progress of discovery has invaded this field also of thought and labor. Commencing with the reforms introduced into scientific investigation by the system of Bacon, it has continued down to the present time, every year adding to the extent of educational science, enlarging its field, but at the same time, defining more accurately its principles, and settling its limits.

As the result of all this, we find education no longer a thing of mere verbal repetition, but a means of *educing*—bringing out the faculties of the mind, by agencies founded upon a careful study of those faculties, and the instrumentalities by which they may be developed. The celebrated Locke emphatically expressed the need, in his day, of a

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* The greatest and most important difficulty of human science is the nurture and education of children.—MONTAIGNE.

change from the *word* teaching, then universal, to the teaching of things. In the words of Hallam, "he did not think that to pour the wordy book-learning of pedants into the memory is the true discipline of childhood." *—Pestalozzi only more closely applied this principle, basing all teaching upon the actual mental experience—the acquired conceptions, of his pupils; teaching principles instead of rules, and appealing to the understanding instead of the mere memory! This necessity of a change from the *mechanical* to the *rational* method of instruction has been, since his time, pretty fully recognized; and this recognition has been followed by the general establishment of teachers' seminaries.

The teacher personally has felt the benefit of this change. His character and social position have been elevated. No longer made the butt of ridicule and the object of caricature, he is regarded by enlightened persons as the member of an honorable and useful profession—a profession requiring at once special training and peculiar talent. The *horn-book* and the *ferula* have ceased to be considered his only necessary implements, both mental and physical; nor is the bankrupt tradesman, or the penniless and spendthrift *gentleman*, deemed fit to *descend* to his lowly and degrading occupation. He is supposed to possess at least *some* information and skill to which those who are not teachers, can have no necessary claim.

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* "Whoever asked his pupil what he *thought* of grammar and rhetoric, or of such and such a sentence of Cicero? Our pedagogues stick them full-feathered in our memories, and there establish them like oracles, of which the very letters and syllables are the substance of the thing. To know by rote is no knowledge; 'tis no more than only to retain what one has intrusted to his memory. That which a man rightly knows and understands, he is the free disposer of at his own full liberty, without any regard to the author from whom he had it, or fumbling over the leaves of his book. A mere bookish learning is a poor stock to go upon; though it may serve for some kind of ornament, there is yet no foundation for any superstruction to be built upon it."—MONTAIGNE'S *Essay on Education.*

Not that this sentiment is entirely of recent origin. Its *theoretical* advancement may claim considerable antiquity. Individual minds, elevated above their fellows by the inspiration of genius, and gifted with the forecast which it imparts, centuries ago, discerned and proclaimed that men are good or bad, noble or mean, wise or foolish, principally through early education; and that, therefore, to the teacher, properly invested with influence and authority, and supported by an enlightened public opinion, must we look for the thorough and permanent improvement of the human race. Thus we find old Martin Luther quaintly remarking in one of his sermons: "If I could relinquish the office of preacher, there is no office which I would more willingly have than that of school-master. For I know that this work, next to the office of the preacher, is the most profitable, the greatest, and the best. Besides, I know not even which is the best; for it is hard to make old dogs tame, and old rogues upright, at which task the preacher's office labors, and often labors in vain. But young trees be more easily trained and bent, howbeit some should break in the effort. Beloved! count it one of the highest virtues upon earth, to educate faithfully the children of others, which so few, and scarcely any, do by their own." This appears to be one of those scintillations of great minds, which have usually been the precursors of wide-spread popular improvements.

Notwithstanding the science of education has been thus improved and exalted, and popular sentiment has become enlightened to so great an extent in regard to the influence of the teacher and the magnitude of his office, it is still, without doubt, very much beclouded in its view of what teaching really is, and what are the essential conditions for the attainment of its proper objects. Teachers themselves too often fail to appreciate the objects and nature of the task which they have undertaken. Absorbed in the mechanical routine of their office, they not unfrequently lose sight of the *end* in their exclusive devotion to the *means*,

teaching the *thing*—geography, grammar, or what not—and forgetting to instruct the *person;* eager to pour in *knowledge*, but neglecting to bring out *mind.*

As an instance, how little of all that is presented to the juvenile mind, during the earliest stages of its development, is at all adapted to the purpose! How often are children allowed to sit, day after day, in the school-room, doing nothing but gathering the rust of inactivity and dullness upon minds that nature left fresh and active! And for what? Perhaps simply that the names of twenty-six arbitrary signs may be fixed in the memory. To teach the alphabet is still conceived by some to be the exclusive and ultimate aim of the first operations in educational training; and, accordingly, the process is a mere repetition of meaningless sounds, or word lessons interspersed with no food for the young intellect, no material to awaken thought, no object lessons to excite attention and cultivate observation, no pleasing interrogations and simple narratives to call up previously acquired ideas, and excite mental activity; but, instead of all this, every possible agency that can induce an ineffaceable sluggishness and torpor, that must inevitably preclude all proper mental discipline in the future.

There is a want of perspicacity—of good sense, or *common sense*, I may say, which often induces parents and teachers to look at the immediate rather than the ultimate effects of teaching and discipline. If a child, after having been under the care of the teacher some months or years, is able to repeat a certain number of sentences or verses, to recite "My name is Norval!" etc., or can answer readily, and without the least effort of thought, questions in geography, grammar, or what not, there are ten chances to one, that the parent, and too often the teacher himself, is entirely satisfied, if not astonished, at the result, and, overcome with admiration, scarcely pauses to think, even for an instant, what the effect of all this is to be upon the future condition of the pupil's mind and character.—It would be a

most interesting task to trace all the ramifications of this wide-spread error, intertwining itself insidiously among all the operations and enterprises of the teacher, blinding parents as to the proper effects of teaching upon their children, and throwing so thick a veil over the apprehension of the people at large, that the subject of education, in all its relations, is dwarfed and distorted. In primary education, as before intimated, this sadly false impression is peculiarly disastrous. Does the parent expect to perceive his child's mind become more active, more inquisitive, more widely awake to the presence of novel objects of attention, more inclined to compare past with present impressions, by a constant attendance at the school? Does even the teacher, in most instances, anticipate such results, or aim at them? Far from it. The little scholar, perchance, begins to lose the vigor and freshness of health. He becomes wan, sickly, inelastic both in body and mind. He, however, pores over his book or map ; he goes through with the mechanical routine of the school exercises ; he has learned to repeat long lists of hard geographical names, and to find them on the map, even on one of outlines only; he can set down any number of millions, billions, etc.; he has also acquired the difficult accomplishment of being able to sit motionless as a statue, not even a stolen, wandering, truant glance transgressing the decorous requirements of consummate discipline, and marring its sublime results. But, *per contra*, what is the return for this loss of health, and this mortification of every natural impulse and desire proper to childhood? Instead of activity, torpidity of intellect; instead of a watchful curiosity, a vacant mind, destitute alike of the power of observation and attention; instead of ideas, "words, words, words." Alas! that any, having the charge of the education of children, should not be convinced that no quantity or quality of book knowledge can compensate for the loss of a rosy face, a buoyant frame, and a mind thirsting for *real* knowledge!

It is in dealing with children of a tender age, that the most fatal consequences ensue from the error here referred to. The mind, and, indeed, the whole nature of the pupil, is so plastic that impressions and tendencies imparted are life-long and ineffaceable. It is then that genial culture is most practicable. The means for it are boundless and inexhaustible; while, left to itself, the mind necessarily deteriorates, and runs to waste. It is for this reason that primary instruction requires, beyond every other, the exercise of skill—requires a profound knowledge of mind, as the subject upon which it is to be exercised, as well as of the various branches of knowledge to be employed as agencies in applying it.

What then is it truly to teach? Byron's short phrase, "to aid the mind's development," contains perhaps as terse and accurate a definition as can be given. According to it, the mind is not to be deemed a "passive recipient," but an active principle,* constantly growing, expanding, and tending to that condition of fixedness, so to speak, which we figuratively denominate *maturity*. The relation of the teacher, therefore, to this growing, expanding mind is not that of the potter molding the fictile clay into any desired shape, but that of the scientific floriculturist, guiding, and assisting by the application of all the subtle principles of vegetable physiology at his command, the growth and development of the living plant. It is only by taking this view of the teacher's office, that we can correctly estimate what may be accomplished through his efforts, when they are put forth with the highest degree of skill, and with all the various resources which a thorough knowledge of his art places at his command. Let this be fully appreciated. Let the people understand, let teachers especially keep constantly in mind, that the true object of teaching is to send forth in-

* The primary principle of education is the determination of the pupil to *self-activity*—the doing nothing for him which he is able to do for himself.—Sir Wm. Hamilton.

telligent, *well trained*, noble-minded men and women; to impress correct habits of thought and action, upright motives of conduct; and to correct, as far as possible, whatever is inconsistent with these; and then the vocation of the teacher will stand second to none in dignity and importance, and teaching will take its place as a science and a profession among the very highest to which men or women can devote themselves.

There are not wanting those who will interpose the objection here that such results cannot be expected from an ordinary course of school instruction—certainly not from a common-school education. Says one, "I want my son to have a *practical* education. Let the three *r's* be well attended to. See that he be thoroughly taught *reading*, *writing*, and *arithmetic*, and all the rest will take care of itself."—It is strange to what an extent some persons are carried away and deluded by mere words. A practical education forsooth! As if it were not practical and practicable, without neglecting the useful branches of education, nay, by teaching them in the best manner,* so to discipline the intellect as to make its possessor a correct and logical thinker and an acute observer; so to train the moral nature as to infuse sound principles, virtuous habits, and noble impulses; and generally, so to build up the whole character,

* "Reading, writing, and some acquaintance with the relations of numbers, are the main instruments by which all further acquisitions are wrought out. These, therefore, have been and will continue to be the main subjects of early school instruction. And these are the tokens by which the correctness or efficiency of any system of primary or common-school education will be tested and judged by the parent and by the public; and rightly too. The error of the old system was not only in neglecting entirely the culture of the perceptive faculties, but in so teaching the elementary branches as absolutely to blunt them. The remedy is not in substituting other subjects of instruction, but in educating the senses, and through the senses, the intelligence and will, and then applying and subordinating these habits of accurate observation and this cultivated activity and power, to a proper method of acquiring the elementary studies and their out-growing attainments."—Dr. Wilbur.

that in ninety-nine cases out of a hundred, education would leave its subject an upright and useful citizen, an active, generous, and enlightened man. This is no speculative extravagance. Such is the uniform testimony of skillful and intelligent educators in regard to the influence of judicious training; and this alone is to be regarded as the true *practical* in education.

> "Earth's universal frame shall feel the effects;
> Even till the smallest habitable rock
> Beaten by lonely billows, hear the songs
> Of humanized society; and bloom
> With civil arts, that send their fragrance forth,
> A grateful tribute to all-ruling Heaven.
> From *culture, unexclusively bestowed,*
> Expect these mighty issues; from the pains
> And faithful care of unambitious schools
> Instructing simple childhood's ready ear,
> Thence look for these magnificent results."

These lines do not express the mere vision of a poet's brain. The sober philosopher in his view of what education should do, concurs with the prophetic strain of the bard: "I call that education which embraces the culture of the whole man, with all his faculties—subjecting his senses, his understanding, and his passions, to reason, to conscience, and to the evangelical laws of the Christian revelation."—"To educate," says Dugald Stewart, "is to cultivate the various principles of our nature both speculative and active, in such a manner as to bring them to the greatest perfection of which they are susceptible." This is the aim which, whether circumstances permit us to reach it or not, we should still constantly keep in view. For even if we admit that, to its fullest extent, it is unattainable; and that we cannot count upon bringing minds, in general, "to the greatest perfection of which they are susceptible," all will acknowledge that we should endeavor to do so—that culture is the proper end of educational training, not merely pouring in facts—"filling the head with learned lumber,

and taking out the brains to make room for it."—He who strives to crowd the memory with facts, regardless of any effect such acquisitions may have either upon the intellectual or moral character, ignoring entirely the fact that the mind, in its largest sense, is an active principle, rapidly maturing in some way, and only needing guidance to mature in the right way, does not deserve the name of *teacher.** Yet, how many teachers there are who possess no other qualification than a knowledge (and that often superficial) of the ordinary school branches to be taught! But that the teacher should possess a familiar acquaintance with the powers and capabilities of the intellect which he is to train, is self-evident. Mind being the subject upon which his operations are to be performed, to work without a thorough knowledge of its nature, must necessarily prove a blind and senseless groping from which only occasional and casual benefit can result, with the almost certainty of serious injury.† It would be considered the wildest and most preposterous charlatanry to attempt the treatment of the body without a knowledge of anatomy and physiology, or to guide the development of the physical system without a previous

* "'Tis the custom of school-masters to be eternally thundering into their pupils' ears, as if they were pouring into a funnel, whilst the business of these is only to repeat what the others have said before. Now, I would have a tutor to correct this error: and that, *at the very first outset*, he should, according to the capacity he has to deal with, put it to the test, permitting his pupil himself to taste and relish things, and of himself to choose and discern them, sometimes opening the way to him, and sometimes making him break the ice himself; that is, I would not have him alone to invent and speak, but that he should also hear his pupil speak in turn. Socrates, and, since him, Arcesilaus, made first their scholars speak, and then spoke to them. *Obest plerumque iis qui discere volunt* AUCTORITAS EORUM QUI DOCENT."—MONTAIGNE.

† "Intellectual philosophy is necessary for the teacher. His business is with mind. He, of all men, should know something of its laws and its nature. He can know something, indeed, by observation and introspection; but he should also learn by careful study. His own improvement demands it, and his usefulness depends upon it."—D. P. PAGE.

study of dietetics and the various laws of health; and yet to undertake this is manifestly no more absurd than to attempt to train the mind, assist in its development and cultivation, and cure its defects, without a thorough acquaintance with mental science and the laws of mental development. As every discovery in the animal economy has led to improved methods of physical and muscular training, and to a more successful regimen in the cure of bodily disease, so, it must be evident, a profound knowledge of the laws of mind, and especially of those which control its growth and development, could not fail to introduce similar improvements in the science of education, and afford such practical rules and processes as would make teaching far more efficient, than at present, in the attainment of its proper objects.—The history of scientific agriculture beautifully illustrates this important truth; for it is familiar to all how greatly success in this department of labor has been enhanced by studying the character of different soils, ascertaining their component elements, and their chemical affinities with the vegetable productions designed to be cultivated. We need a Liebig, in educational as well as chemical science, to apply its theoretical principles to practical art, and demonstrate the vast advantage of scientific, over merely experimental, often haphazard, processes. For the teacher who is to till the soil of the mind, must, like the agriculturist, attentively investigate its nature, and adapt his operations to its character and capabilities, or his vocation will never rise above a mere mechanical employment, in which only inferior minds will be content to be engaged.— It is true that many efficiently discharge the duties of teachers who have never made these scientific principles a subject of regular study or research. There are a few minds that discern intuitively more than others can discover by the most laborious investigation; and thus they often employ the most subtle and abstruse principles of science without being the least conscious of it. These are, however, exceptional cases; and as genius

is superior to all rules of art, constitute no criterion of what is necessary for ordinary minds. There are others that employ arbitrarily certain rules and processes of teaching, which they have acquired by imitation, or have borrowed from the experience and intelligence of others, without understanding at all the principles underlying them. These, there is no doubt, constitute a very considerable portion of those engaged in teaching. But how greatly would their resources and usefulness be increased by a familiarity with the scientific principles of their art! With how much more correctness, as well as expertness, would they be enabled to adapt it to the innumerable diversities of mind, disposition, and circumstances which they are obliged to meet! How much more variety and novelty would they be able to command in order to sustain the flagging interest, and excite to eager attention, without which no teaching can be made available. The great difference between the mere artisan and the scientific operator is, that the former has only one set of rules, adapted to such cases as *generally* arise; and, accordingly, when any peculiar exigency occurs, requiring a deviation from them, he is entirely at a loss; while the latter is always prepared. Whatever demand may arise, however unexpected the conjuncture of circumstances, he is able to draw from the general principles with which his mind is stored, a process for removing the difficulty. It is so in every department of human effort. A thousand exigencies are liable to arise which cannot be foreseen, and which can only be met by the application of principles. Mere rules and processes of art are then utterly useless. "Valuable knowledge," says Dr. Campbell, "always leads to some practical skill, and is perfected in it. On the other hand, the practical skill loses much of its beauty and extensive utility which does not originate in knowledge. There is, by consequence, a natural relation between the sciences and the arts, like that which subsists between the parent and the offspring." On the same prin-

ciple, Lord Bacon says, "Expert men can execute and judge of particulars, one by one; but the general councils, the plots and marshalling of affairs, come best from those that are learned."

These considerations manifestly establish the truth that teaching is founded upon *some* scientific principles which the truly efficient teacher must, of necessity, fully understand. What these scientific principles are, and from what they are derived, will be now briefly considered. It must be apparent that the science of teaching must be founded, in some way, upon mental philosophy; but it is nevertheless widely distinguished from mental philosophy. This treats of what the mind does when in a condition of maturity, that, of the manner in which it attains that condition,—of the laws of its growth and development. The relation between the two is similar to that which exists between botany or vegetable physiology and scientific farming or horticulture. Before we can aid in the growth and development of a plant—"bring it to the greatest perfection of which it is susceptible," we must understand its structure, organization, and peculiar character, as well as the agencies by which its growth is to be stimulated or repressed, so that it may attain the highest condition of fruitfulness or beauty.—In the case of the mind, possessing, as it does, so many and such diverse powers, and performing so many various operations, there are peculiar points of inquiry, which, after mental philosophy has been thoroughly studied, naturally present themselves, and the complete solution of which constitutes, in a great degree, the science of intellectual training.

In what order do the mental faculties naturally tend to be developed?—This, the first inquiry, is very important, and is fundamental. There is no doubt that, in teaching, as in every thing else, nature should be our constant guide; and that, instead of vainly attempting to overrule her, and substitute our senseless wishes and designs for her unalterable and imperative enactments, we should anxiously ex-

plore and implicitly obey them. To do otherwise is to labor for a merely temporary or an impossible result.

"Naturam expelles furca, tamen usque recurret."

Observation can scarcely fail to convince the most heedless that she has legislated with respect to this point, and that a certain and uniform order is observed in the development both of the intellectual powers and moral propensities of human beings. Education must take cognizance of this, and shape her course accordingly, or failure will inevitably result. Says Prof. Henry, "The laws which govern the growth and operations of the human mind are as definite, and as general in their application, as those which apply to the material universe; and it is evident that a true system of education must be based upon a knowledge and application of these laws. . . . . The several faculties of the human mind are not simultaneously developed; and in educating an individual, we ought to follow the order of nature, and to adapt the instruction to the age and mental stature of the pupil."

Watch the dawn of active intelligence in the mind of the infant! How rapidly and beautifully does it pass from mere sensation to observation, and from observation to the recognition of persons and objects formerly beheld, or of sounds formerly heard! In this manner, conception is brought into play, the mind receives ideas, and the memory retains and recalls them by that wonderful principle of association, which Rogers has so beautifully described:

Lull'd in the countless chambers of the brain,
Our thoughts are linked by many a hidden chain.
Awake but one, and lo, what myriads rise!
Each stamps its image as the other flies.—

In this way, as the power of conception* is developed, by the unaided operation of natural agencies, articulation

* By *conception* is here meant the power of recalling ideas and making them the subject of thought or of any mental process in the absence of actual perception. Thus *perception* is receiving an impression in the mind from a present object of sensation; *conception*, the revival of that impression when the object is absent.

commences; words are connected with conceptions; and talking and thinking move on together. Take a child of five years of age, as it enters one of our elementary schools to be subjected to the manipulations of the teacher, and consider what acquisitions it has made in this way. The senses, actively awake to receive impressions, have brought it into communication with the multifarious objects of external nature; the faculty of conception, in nearly uninterrupted play, during the hours of waking and even of sleeping,* has given it a corresponding number of ideas; it has acquired a vocabulary of about two thousand words, and quite a considerable facility and correctness in their combination and use. Indeed, when we reflect upon it, the acquisitions, unaided and intuitive, of a child of five years, are truly astonishing. There is no doubt that they far exceed those of any other corresponding period of subsequent life. It is thus that *conception*, aided by the law of *association*, lays the foundation of the whole intellectual character. Here is no senseless cramming of words; for words are only acquired to represent actual ideas, and are used as fast as acquired. Under the guidance of a thoughtful and intelligent teacher—a teacher properly conversant with the operations of mind and the laws of its development, this natural process would go on, guided to its proper objects. Instead of the mental treadmill, so often substituted for it, it would be sustained by that food for which nature always implants a craving—and this food is never mere formulæ, verbiage, or a dull and monotonous repetition of meaningless sounds.

* A voluble little girl, employing a vocabulary of one, two, or three thousand words, is never stopped by a jar of the machinery, connecting the word and the thought. Now, this perfect working of an apparatus so complicated, well consists with the belief that the sixteen or twenty hours of every day—*sleeping* or *waking*, during which the conceptive faculty is in undisturbed operation, are devoted, in the intention of nature, to the latent process which assimilates ideas and words, in an indissoluble manner.—Taylor's *Home Education.*

The modes of instruction, in primary schools particularly, should have careful reference to this natural procedure in the development of the mental faculties, and constantly keep in view the mental condition and progress of the child, gently urging on but never transcending it. The rational method (in contradistinction to the mere mechanical or rote method) is applicable to all the various branches ordinarily taught to young children in these schools. The reading lessons, for example, should be always adapted to the conceptions and general condition and progress of a child's mind. They should be made the medium of communicating or *recalling* ideas, and thus of stimulating or exercising the mental activity. Speaking or reading should be made to go on with *thinking*. To disjoin them in the early stages of instruction, is not only opposed to healthy mental progress, but lays the foundation of incurably vicious mental habits. What advantage can that mind derive from reading which has been habituated to pronounce the sounds suggested by the printed page without a single thought of the ideas which they are intended to convey! Much of the reading matter afforded for the intellectual improvement of children, seems elaborately constructed to prevent it, or, at any rate, to sacrifice it to expertness and accuracy in mechanical reading and spelling. For instance, nothing can be more senseless than to employ such a jargon as the following for any purpose:

"The cat is the dam of the kit. She can sit on the mat. She was by the hay to-day. A fat rat ran by. Can the cat eat a rat and a bat? We eat no rat, nor bat."... "Ask Ann, if she, or my son, has got the hen. Do not sob, my son, if the hen hop up on the top of an ash log."

That the intelligence of children should be developed by such jargon as this, is simply impossible; and, perhaps, the authors or inventors do not claim this for it. All they claim is, perhaps, that it is an efficient kind of machinery designed to familiarize the eye and the tongue with certain verbal forms. Admit that it is. Must we sacrifice the mind itself

in educating it? Must we deaden the intellect, quench the natural intelligence of a child, in order to make him a good reader or speller? May not a good speller be an intolerable dunce? Nay, must he not, of necessity, become one, if long confined to such exercises?

This nonsensical and, of course, unnatural process often results from supposing that spelling must be taught before reading; whereas, the simplest knowledge of mind would dictate the reverse; that, in all cases, spelling should be acquired by means of reading (and writing), and not reading by means of spelling.—To adopt the other mode is erroneous, because by means of it the mind—the intelligence—of the child is not addressed. It calls up no images, elicits no ideas; in short, it gives the mind *nothing to do.* On the other hand, by pictorial illustrations, drawings on the blackboard, the use of actual objects, and such appliances, a very short time is required to impress upon the memory of even a very dull child, the form and proper pronunciation of a considerable number of *intelligible* words; and (what is more important) the power of attention is increased, and the mental activity sustained and exercised.

In addition to the faculty of forming conceptions, there are others which are very early developed in the minds of young children, for which primary instruction should provide proper employment. The scope of these remarks only permits a brief allusion to them. Such is the ability to recognize analogies in objects which, on the whole, are very dissimilar; from this naturally follows a comparison of objects and ideas, after which the mind passes, but slowly in most cases, to a recognition of abstract qualities. The idea of number is, for example, thus obtained, and is, probably, one of the first acquired. Then follows generalization, which leads directly to *logical* thought, or ratiocination. This, with judgment, and, perhaps, imagination, considered independently of conception, is developed slowly, and in its highest exercise belong to the last stage of the mind's

growth.—No attempt is here made at an exact enumeration or an elaborate description of the different faculties of the mind or their order of development, the object being merely to show that such an order does exist, and that it should be understood by the teacher in order that he may adapt his instructions to the mental *status* of his pupil, and thus make it efficient. No mention has been made of memory, because it is simply the power of retaining and recalling the results of the other faculties, and does not need any special cultivation. There is nothing that is so injurious in education as exercising the mere memory; for example, by requiring children to repeat long lists of words or sentences, pieces for recitation, etc., which their minds are too little developed to understand. Memory in such cases is abused; it retains and recalls the results of no *intellection* whatever, but only sounds, connected by merely arbitrary association.

A second point of inquiry, and one which must serve as a guide in very many of the operations of teaching, is, *What is the comparative rapidity with which the mental faculties tend to be developed?* For, as the faculties of the mind are not developed simultaneously, so neither are they developed with equal rapidity. Here, too, if we would consult the welfare of the child, we must take into careful consideration the provisions of nature; for there is no doubt that, in the wise and beneficent dispensations of the Creator, the development of the mental faculties, both with respect to *order* and *comparative rapidity* has been made to depend upon, and accord with, the physical capabilities peculiar to each stage of growth. Some faculties, for instance, require a more vigorous exertion of the brain than others, and would, for that reason, be less adapted to the immature strength and constitution of childhood. To encourage the exercise of such faculties, and stimulate their growth with unnatural rapidity, would, of necessity, seriously retard the bodily development, and imperil the health, at the same time, introducing such disorder into the mental constitution, as

would impede, if not entirely prevent, all sound intellectual growth. That much injury is often done to children by a violation of this principle, will doubtless agree with the experience of most, if not all, teachers. Between the mind and body there exist so powerful and constant an action and reaction, that, by an error of this kind, the vital energies are often so impaired in childhood as to preclude all bodily and mental vigor forever afterward. Mental growth and culture must, in all cases, be subordinated to physical well-being. *Mens sana in corpore sano—a sound mind in a sound body*, is truly to be prayed for, as the Roman poet remarks, as one of the greatest blessings of this life; we say *one*, for the two things are inseparable. "The first thing in every efficient man," says Emerson, "is a fine animal."* We must be careful not to destroy the casket in our enveavors to develop the beauty and brilliancy of the gem which it enshrines. All judicious and thoughtful educators must admit that in addressing the reasoning powers and the judgment, *festina lente* must be our motto. Minute analyses, ratiocination—consecutive trains of argumentative or demonstrative thought, task the mind and the brain more severely than any other intellectual processes. These faculties are, for this reason, developed by slow degrees. Yet, there is no error in teaching more common at present, than to attempt to bring into active and constant exercise the reasoning powers of children of a very early age. The pendulum of error oscillates from senseless, stupefying repetition and rote-learning on the one hand to continuous ana-

* "It is not enough to fortify his soul, you are also to make his sinews strong; for the soul will be oppressed, if not assisted by the body; and would have too hard a task to discharge two offices alone. I know very well how much mine groans under the disadvantage of a body so tender and delicate that eternally leans and presses upon her; and often in my reading perceive that our masters, in their writings, make examples pass for magnanimity and fortitude of mind, which really have more to do with toughness of skin and hardness of bones."—MONTAIGNE.

lyzing and reasoning on the other. Every process or rule must be referred to its fundamental principle, however abstruse, and this principle must be demonstrated with rigorous logical accuracy. A child must not be taught to write a number or to add a column of figures until the whole philosophy of the decimal notation has been elaborately enunciated and expounded. The "why and the wherefore" thus becomes a sort of Procrustean bed whereon the youthful mind is stretched and racked out of all healthful vitality. And this is very often admired as the acme of excellence in mental training, many teachers having no conception of any other object or kind of intellectual culture than to exercise the reasoning faculty, and, generally, by hard problems in arithmetical analysis, involving severe abstract demonstration. There is nothing that so forcibly reminds us of the wise remarks of Horace,

Dum stulti vitant vitia in contraria currunt.

Isaac Taylor, in his truly admirable and philosophical work on *Home Education*, very justly remarks: "The *Rationative Faculty*—a complex habit, is, in the order of nature, late developed, and those who would see it expand under the most favorable auspices, must direct their cares, not to the endeavor to anticipate its proper season, but rather to the means of carrying the mind on to a certain point of maturity, before any serious exertion of it is promoted. Nevertheless, from a very early period, and especially after the time when the faculty of abstraction comes under culture, the teacher will keep in view what is to follow, and will watch for, and improve, any favorable opportunities that may occur for giving a little initiative play to the reasoning power, *so far as nature herself may appear to have developed it.* To what an extent—an extent altogether incalculable, does the well-being of the individual, and of the community, depend upon the soundness, and the consistency, of the culture that may be bestowed upon the reasoning faculty, in early life!"

There is no doubt, that, in its elementary stages, teaching must be desultory rather than logical. Nature dictates this. The child is educated, at first, not by consecutive thought. The infant mind, like a narrow-necked bottle, receives knowledge in drops, not in a continuous stream. Not that primary teaching need be unsystematic. The teacher must gather the materials for his work as the artist selects the variegated fragments which he is to arrange into a piece of elaborate mosaic. The connection between the separate parts has no existence save in the mind of the artist. His conception binds them together in a form of enduring symmetry and beauty.—Let the young mind be presented with the food for which it craves. Not dry facts, wordy formulæ, scientific definitions, or tables of chronology, but something that addresses his ideality, gives play to conception—what we may call the flowers of knowledge, which may be scattered with no apparent system, although selected by the teacher with all the nice discrimination and intelligence of the most highly cultivated judgment.—Ignore the love of novelty in children, and the work of teaching becomes as fruitless as to attempt to write on water. The machinery of the dull exercise, indeed, goes on the same, with the exception of an occasional yawn, impossible to be repressed; there is the same movement of the muscular system; "voices keep time," eyes are fixed, heads upright, toes extended at the right angle; but, alas! the machinery of the mind has stopped; you keep up steam when the connection has given way. The locomotive goes on, but it leaves the train motionless miles behind.

A third point of inquiry is, *What tendencies to distortion, and what kinds of distortion, are the various faculties of the mind subject to?*

A complete system of education should embrace a consideration of the phenomena presented not only by healthy, but by morbid, growth. It should be able not only to form but to reform,—not only to develop with the assistance of

nature, but to correct when her general laws seem to have been superseded by untoward influences.—With respect to this point as to many others, education is purely an inductive science, and its principles and rules must be based upon a long and careful observation of the manifestations of mind, presented during its several stages of growth. We do not, perhaps, possess a sufficient number of such facts to make an accurate generalization, so as to form practical rules sufficient for our guidance in all cases. The subject has not received that special attention which is necessary for a full and reliable exposition of the theory of teaching in this regard. The materials for such an exposition must, in great part, be educed from the daily and hourly experience of the school-room; and by carefully gathering and collating the facts of this experience, and employing them for the extension and improvement of the science of teaching, it is in the power of the humblest laborer in this great field, to contribute to the proper establishment of his profession—to the erection of that temple of science, in which, and in which alone, it is to be permanently enshrined and preserved.

In that admirable allegory of Dr. Johnson in which he represents the various stages of human life under the beautiful and expressive figure of the ascent of a mountain, there is a very important principle illustrated which bears immediately upon this point: "As Education led her troop up the mountain, nothing was more observable than that she was frequently giving them caution to beware of Habits; and was calling out to one or another, at every step, that a Habit was ensnaring them; that they would be under the dominion of Habit before they perceived their danger; and that those whom a Habit should once subdue, had little hope of regaining their liberty." There can be no doubt of the truth of the principle here so beautifully represented, and that the character, both moral and intellectual, is established, in a great degree, by the formation of habits. These, when depraved, constitute what has been

called above morbid or distorted growth, and, at an early age, may, although with more or less difficulty, be eradicated. In moral, this is doubtless much more difficult than in intellectual education; since, in the former, the passions and appetites exert an opposing influence; while, in the latter, the only resistance to be overcome, in addition to that of habit itself, proceeds from indolence, or that kind of inertia by which the mind resists a change of condition. No part of the teacher's duty is more important than a constant vigilance so as to arrest the formation of deleterious habits, or to aid in forming such as are calculated to confirm the healthy progress and development of his pupil's mind. The mind of a child may, with respect to the influence of habit, be compared to a plastic material having a tendency to set, the greatest skill and tact of the artisan being required to prevent its setting unequally or unsymmetrically, since when once lost, the plasticity can never be restored (if at all, only with exceeding difficulty).—As in such case, the principal object of the workman, must be to see that symmetry of form is secured before the establishment of this fixed character, so the teacher must deem it the highest aim of his exertions to guard against the formation of such habits as would impair the symmetry or *balance* of the pupil's mind.*

Let the teacher, therefore, constantly bear in mind, that habits are always more valuable than facts; that it is not the quantity of knowledge acquired that constitutes a criterion of the mind's improvement, but rather the modes of employing the mental faculties,—the *habits of thought*, into which the mind has settled, in making its acquisitions or applying them. In view of this fact, it was judiciously remarked by Erasmus, that, "at first, it is no great matter

* "If we study carefully the whole class of what are commonly supposed to be instinctive acts, in the human being, we shall find that the most of them are automatic rather than instinctive, or the result of habit based upon experience."—Dr. Wilbur.

how much you learn, but *how well* you learn."—In such useful arts as require a mixed exercise of the muscular system and of the mental faculties, such as penmanship, drawing, elocution, etc., this principle has a most important application. Elegant hand-writing, distinctness of articulation, correctness of intonations, ease and grace in deportment, may all be made to rest so firmly on thoroughly fixed habits as to become almost instinctive—a kind of "second nature."

Subsidiary to the study of mental science, as one of the essentials of scientific teaching, and forming the basis for a distinct series of inquiries, is the consideration of *language in its relations to mind*, and not simply as a means of communicating the results of thought and ratiocination, but as an instrument by the aid of which the processes themselves are carried on.—Language is the most important instrument of the teacher; it is the subtle agent by means of which he is enabled to explore the innermost recesses of his pupil's understanding, and fill it with "all precious and pleasant riches." But it can become this only when employed with a constant reference to its relations to the mind and its processes. In this point of view, a knowledge of language embraces much more than the ordinary machinery of grammar, required to secure verbal precision or rhetorical elegance. Conjugation, declension, sentential analysis, and verbal parsing have no part whatever in this consideration of language. These may all be thoroughly understood without the existence of a single glimmer of intelligence as to how the mind employs language as an instrument of thought, and how, therefore, the teacher should avail himself of its vast resources in "aiding the mind's development." The teacher must possess a deep insight into those subtle and recondite principles by the operation of which this wonderful process is carried on. He must clearly perceive in what way it becomes not simply a *vehicle*, but also an *instrument*, of thought. In the absence of this

particular knowledge, he cannot avoid being constantly in error—either by neglecting to make use of the various agencies which language affords for discipline and instruction, or by failing to adapt his language to the mental stature of his pupil, and thus darkening his understanding by a cloud of meaningless words. In fact, the common error of teaching mere words, arises not more from an ignorance of the nature of mind than from a want of perceiving in what way language is related to it. Occupied as the teacher is in processes having for their object to influence and direct the functions of mind, it is obvious that nothing can more properly engage his study than this great instrumentality of mental intercommunication. A contemplation of the multifarious combinations of ideas, the endless variation of thought and opinion, their complex relations and niceties of dependence and affinity, cannot fail to inspire us with amazement and admiration at the vast resources of that intellectual implement by which their intricacy is completely overcome and every minute distinction, shadowy outline even, of thought,—all the light and shade, the perspective, and glow of the mental landscape, are brought out and presented with almost photographic accuracy and completeness. Employing this wondrous instrument from the earliest period of existence, we lose by familiarity a just sense of its immeasurable importance, beauty, and exquisiteness; just as the sublime spectacle of the starry heavens, in some minds, scarcely ever excites a single emotion of pleasure or admiration. "Because," says Emerson, "every night come out these envoys of beauty, and light the universe with their admonishing smile; but if the stars should appear only one night in a thousand years, how would men believe and adore, and preserve for many generations the remembrance of the city of God which had been shown." Thus, the familiar use of language carries the mind away from a contemplation of its vast and indispensable utility to us; and our whole attention is given to the study of those, generally ar-

bitrary, rules which serve to secure a merely technical precision.—These must, of course, be studied; and for practical purposes, are all that, in general, need be studied; but, the philosophy of language which belongs specially to the science of teaching, is rather analogous to that mixed science of language and mind—logic, in which, both as a science and an art, may be found very much that is indispensable to the teacher. Considering, as it does, how the mind passes from simple and concrete ideas to such as are compound or abstract; how it operates in framing an argument and in conducting a train of reasoning, and in what way it is dependent upon language in carrying on these processes, it must evidently furnish many of the principles by the application of which teaching may be made effective.

Another and no less important subject for investigation in reference to scientific teaching is found in the *relations of knowledge to mental development.*

Knowledge is the food of the mind; since by the proper reception, digestion, and assimilation of it, the mind attains a maturity of growth and strength; and upon its quality and quantity must depend whether that mind shall become healthy and vigorous, or puny, sickly, and imbecile. It is of the first importance, therefore, to ascertain the effect produced by each distinct species of knowledge upon the mind—what faculty it exercises, and thus tends to develop. It is only in this way that we can properly arrange a course of study for any particular stage of education; and it is self-evident that success in teaching must very greatly depend upon the branches of study selected, and the order in which they are presented to the mind. In general, this selection is almost uniformly made with reference to a very different principle; regard being had not to what will best develop, what will be of the greatest practical utility in imparting to the mind itself the power of acquiring knowledge, and of employing it effectively, but what, whether it can be assimilated by the mind or not, seems best adapted to those

pursuits which, it is presumed, will engage the child in after life. In this way, the great end of teaching becomes the imparting of what is called useful information; and thus the memory is overburdened, while the understanding is starved. The question should never be, what will the mind need in twenty years from the present time, but what do its present capacities fit it for. As well give a child the food of a strong man, on the plea that when he becomes a man, he will need it, as to look exclusively at future wants, in supplying the intellectual food which is to afford present nourishment and vigor.

Not that the practical usefulness of the knowledge presented to the youthful mind, should receive no consideration. It should, in all cases, be made the criterion of selection between subjects having equal efficacy as means of exercise and development, but should always be treated as of secondary, instead of primary and exclusive, importance. If the proper end has been kept in view, and in place of making mere acquisition and accomplishment the only objects of regard, the attention of the student be directed to such subjects as will best develop the intellectual character, and bestow upon it the power of steady application and accurate thinking, there need be no anxiety but that, as far as the power of education extends, he will be enabled to meet all the exigencies of his future life.*

It is not, however, with reference to the order of studies alone that this branch of the science of teaching is impor-

* There is no doubt that the consideration of practical usefulness in the knowledge presented should have increased weight as education advances; while in the first steps cultivation or development should be exclusively considered. In regard to this it is properly remarked by Dr. Wilbur, that in the early stages of education "mental steps" are by no means "mental acquirements;" since in these as in the higher stages, "a thousand facts and ideas, having been used as steps in the development process, may be laid aside and forgotten. For what a miserable affair a man would be, if he could remember or did remember all the facts and ideas that have helped in his growth towards manliness!"

tant. Where this due order has been fully determined, and is peremptorily prescribed for the teacher's guidance, no less care is required to adapt the methods of teaching each branch to the particular faculty which it is designed to develop. Without this, a subject of study having an especial reference to the judgment or reason, might be made to depend exclusively on an exercise of mere memory. For instance, by an error of this kind, some teachers permit their pupils to commit to memory the language of geometrical demonstrations, instead of thinking out the connection of the several steps, and the dependence of the propositions upon the fundamental definitions. In fact, the great error committed by young and inexperienced teachers, consists in bringing into play the single faculty of memory,—and that kind of memory (certainly the lowest) which depends upon an arbitrary association produced by the habitual hearing or seeing of things in connection one with another. This law of association being one of the most obvious phenomena presented by the mind, is, of course, at once seized upon by the teacher who views education merely as a means of imparting a knowledge of the rudiments of written language, and of teaching by rote the elementary facts of science, because of its availability for such a purpose. When a teacher conceives that the sole end and aim of his efforts is to enable the pupil first, to recognize and call by name the arbitrary signs of the alphabet, then to combine them into syllables and words, and finally, to repeat them in connection (often called *reading*), he is certainly to be excused for resorting to the shortest and most direct means of accomplishing this design—an appeal to the law of arbitrary association. The injury done to the mind by this continued process, is incalculable; since, finally, ideas come to suggest each other according to no intrinsic or philosophical relation, but only from their accidental connections, or such as constant repetition may have established. Thus, the *modus operandi* of the mind becomes entirely vitiated, and it never

acquires any logical flow of thought. This is only one of many illustrations which might be given to show the importance of the teacher's knowing the nature of the understanding which he is to educate and the influence to be exerted upon it by the particular branch of knowledge which he is called upon to present for its acquisition.

Every one must perceive that if he aim to teach any subject whatever for its own sake rather than for the effect which it is to have upon the mental character of his pupil, he will adopt very different methods, and work with quite a different spirit. In the one case, he will have no motive to do any thing beyond teaching the mere details of the subject,—the rules and operations belonging to it, and, perhaps, their practical applications; in the other, he will be impelled to study carefully the mental constitution and characteristics of the student, to ascertain in what respect culture is most needed, and to modify, as far as possible, his instructions, so as best to accomplish this most desirable purpose. The former practice will also conduce to another serious error on the part of the teacher. He will be prompted to seek too hastily for immediate results, and to devise constantly opportunities for displaying them. He will, under this erroneous impression of the true success of his work, suppose that he has fulfilled his task, when he finds his pupil able to perform his part well in some special school display, and to acquit himself successfully in the usual routine of question and answer employed on such occasions—a kind of catechism to which he is accustomed by long previous repetition, and which is not calculated to bring the mental faculties into exercise by varied interrogatories, presenting the subject under many different aspects, and testing the ability of the mind to perceive its true relations and grasp its multifarious combinations. He will, thus, fail to realize his great responsibility, as a public guardian appointed to feed and direct those streams which must, as they flow, fertilize or deluge his country. He will

forget the future in his efforts for the present, failing entirely to perceive that the legitimate processes of education operate like the genial agencies of nature,—quietly, almost imperceptibly, yet, with unerring certainty, attaining their proper ends. The seed is laid in the bosom of the earth; and the dew, the rain, and the vivifying light and air, all operate with sublime and beautiful serenity and simplicity to produce the golden harvest. We have here no "flourish of trumpets," no parade of partial results (though each step is exact and definite), no pompous show of mechanism; but, with calm and silent potency, the work is gradually but surely achieved. The sculptor who would create from the shapeless block, a form matchless but with nature's handiwork, must content himself with chiseling away fragment after fragment, until the ideal in his imagination, is impressed upon the lifeless marble. The teacher, too, who would be indeed a teacher—an *educator*, must "learn to labor and to wait."

After the relations of knowledge to mental growth and culture have been fully investigated, and the proper order of studies has been settled, the next point of inquiry that arises is, *by what methods may the several branches of study be best presented to the mind.* This department of the science of teaching is wholly *deductive*, the principles underlying it being drawn from two sources: first, the general theory of intellectual education already considered; and second, the nature of the subject to be taught. Methods and rules of teaching may, indeed, be arbitrarily learned and mechanically applied to practice, without any investigation of those principles; but no intelligent and independent operation can be carried on, unless they have been thoroughly acquired. For example, if we would ascertain and prescribe the proper methods of teaching *spelling*, we must consider, in the first place, what faculty is principally concerned in acquiring and employing this branch of knowledge. Is it to be addressed to the memory, the reason, or

the imagination? If to the memory, how far is it founded upon the remembrance of form or figure, and thus controlled by the eye; or to what extent is it dependent upon impressions made upon the ear; and, in either case, is it based upon arbitrary association, or upon logical connection? It being an established principle in mental science, that whatever is presented to the mind through the medium of sight, makes a deeper and more permanent impression than that which is simply addressed to the ear,* advantage should be taken of this fact, and merely oral exercises, where possible, give place to those in which the pupil himself is required either to write what he is to commit to memory, or constantly to view some striking delineation of it. When form and outline, or relative position and contiguity, are to be impressed upon the memory, this may, of course, always be done; and teachers very often fail from not availing themselves of this law of the mind.

In teaching spelling, this principle is often entirely ignored, inasmuch as oral exercises are exclusively employed, the teacher thus depending upon the impression made upon the ear, instead of calling in the aid of sight, and thus durably imprinting upon the memory the correct *form* of each word. In teaching geography without the use of maps there is a similar violation of the same principle. On the contrary, in the method of teaching this subject by requiring maps to be drawn from memory by the pupil, and a full description given of every part, we discern a beautiful recognition of its truth, and a forcible illustration of its utility and importance.

There are many subordinate points of inquiry having reference to methods of teaching, which can only be answered by having recourse to the principles just mentioned; such as, in what manner the subjects to be taught should be divided, and in what order the divisions should be taken

* Segnius irritant animos demissa per aures
Quam quae sunt oculis subjecta fidelibus.—Horace.

up; whether the analytic or the synthetic method is best adapted to the purpose of instruction; to what extent concert repetition, or teaching in the mass, can be effectively and usefully employed; how far rote-teaching may be used; what is the proper use of interrogation, and how far the pupil should be made to depend upon his own mental resources without the interference of questioning. This department of the science of teaching is a very comprehensive and intricate one, and, therefore, requires much careful elaboration and profound study. Without a perfect familiarity with the subjects themselves, it would manifestly be absurd to expect any degree of success. It is true that scholars often learn despite the efforts of ignorant and blundering teachers, just as nature often steps in, and cures the patient after a long series of senseless prescriptions and quackery; and it is on this account, probably, that persons, who are usually considered sane and rational, have been insane and irrational enough to argue against the need of accurate and extensive scholarship as a qualification for teaching; nay, sometimes to advocate ignorance as an efficient auxiliary, on the ground that the teacher, to keep up with his pupils, would be obliged to make constantly new acquisitions, and the very *novelty* would inspire him with earnestness and enthusiasm in teaching them.*

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* The writer himself heard this argument seriously offered in an address to teachers, but, he is happy to say, by a member of another profession. It is too often the case that teachers submit to be lectured by those who, devoting themselves to very different vocations, can scarcely be expected to understand that of the teacher, however humble it may be. This is a kind of quackery which no other profession considers consistent with proper self-respect. The opinion of a practical teacher of *active mind* and *enlarged experience* is, of course, to be preferred to the most elaborate thought-spinning of a thousand theorists, apt to soar, as they almost always are, into the regions of transcendentalism, and forgetful entirely of that wise saying of the immortal bard, "It is far easier to teach twenty what were good to be done than to be one of the twenty to follow the teaching."

There are many other topics of inquiry which the science of education may be considered to comprehend, not only in regard to intellectual but to moral training. The latter, indeed, presents as wide a field of research as that already reviewed, and needs quite as careful an exploration. The connection between intellectual and moral culture, the basis of the latter as a separate branch of education, what specific laws it comprehends, on what principles of moral science it is founded, what practical rules flow from these, are inquiries that afford material for careful investigation and earnest study. To these may be added the consideration of *discipline*, as a particular department of the teacher's profession, requiring, as it does, a theoretical and practical acquaintance with human nature, and more particularly with the various dispositions, passions, and peculiarities of childhood; demanding, too, so ready and expert an application of these principles as can result only from long experience and careful practice, together with inexhaustible resources of intelligence, ingenuity, and address.—It is in this department of education that the greatest need exists of more judicious and effective processes. There is nothing in which greater abuses exist than in school discipline. It certainly is not a system by which children may be kept silent and motionless through the coercion of an iron rule—a reign of terror. It does not consist in *re*pression but rather in *im*pression. Restraint, *forcible* restraint—the law of violence, accomplishes nothing in moral discipline; yet very many teachers strive to effect nothing more, than the production, through this law, of *order*—outward decorum in their schools; satisfying their consciences very often by citing the maxim—

"Order is Heaven's first law,"

which has been often inscribed on the walls of the schoolroom as a justification for this exclusive aim. As if the poet meant to say that *order*, in any such sense, is *Heaven's*

*first law.** When order and subordination, prompt obedience to authority and submission to rule, have been perfected, then moral training may be commenced.—There is very much that passes for consummate school-*teaching*, which deserves only the name of school-*keeping;* and, hence, sometimes arises that strange paradox, urged by some, that ignorance is not entirely inconsistent with the exercise of the art of teaching.—That kind of art which is required to train dogs or horses, may, indeed, exist in close communion with the profoundest ignorance, and may be able to preside with admirable skill and address over the elaborate mechanism of school tactics; but to confound that with the art of teaching, or the art of true discipline, is like mistaking the talent of a sign-painter for the genius of a Raphael or an Angelo. It is substituting the material for the intellectual, and blending, with undiscriminating stupidity, the dancing automata of a puppet-show, with the living and thinking creatures which are the handiwork of God.

Intellectual and moral training are, in many respects, inseparable. In the former, when legitimately carried on, there is an indirect moral influence, which is apt to be overlooked. Every thing that expands and develops the mind of a person, and trains it to habits of correct thought and ratiocination, must refine and elevate it, and, by enlightening his conscience and changing the character of his enjoyments, give a different direction to his passions and desires. It has been remarked that there is an intimate affinity between the sentiment of virtue, and that love of the sublime and beautiful, whether in nature, art, or literature, which is the invariable concomitant of a cultivated mind. Indeed, virtue in the moral world, holds the same position as symmetry, grace, and beauty in the natural; and a perfectly

* As this line is so often misquoted, it may, perhaps, be well to suggest that Pope meant not order in the sense of *due arrangement*, but order, in the sense of *gradation of rank, series, one thing above another;* not the opposite of *confusion*, but the opposite of *equality of rank.*

virtuous character affects us with a sensation analogous to that which we feel on beholding the master-piece of the statuary or the painter. If such be the case, he whose taste and imagination have been disciplined by a familiarity with beauty as exemplified in science and literature, must, in an important degree, acquire a love for moral harmony and beauty, and imbibe a corresponding repugnance to the loathsome form of vice. We have not only *a priori* evidence of this fact: it is irrefutably established by the records of crime in every civilized country, showing, as they do, that a very small proportion of those convicted of crime, belong to the educated classes, imperfect as most of the educational processes of education are, even as to the culture of the intellect.

The relations of intellectual and moral education thus form a distinct and interesting topic connected with the general subject of educational science, which needs careful investigation and discussion. Its importance cannot fail to be appreciated by every teacher who labors in his profession with the right spirit and the proper aim. It can, of course, receive no consideration when that aim is merely utilitarian and practical, in the common acceptation of those terms; but only when it conforms to that wise doctrine which Plato propounded more than two thousand years ago: "That training which teaches how to make money, or aims at the development of mere physical strength, or the communication of skill in any mechanical business or common art, without intellectual culture and a sense of right, does not deserve the name of education."

In view of this just principle, how groveling appear the aims of some of our most eminent *soi-disant* patrons of education. In the opinion of these, to fit a youth for the mechanic's bench, or the merchant's counting-house, is to accomplish all the ends of education. Let such who would thus degrade education, and refuse to their race, except a favored few, the benefits of intellectual and

moral culture, carefully con those just and beautiful lines of Shakespeare :

> "What is man
> If his chief good and market of his time
> Be but to sleep and feed?—a beast, no more.
> Sure, He that made us with such large discourse,
> Looking before and after, gave us not
> That capability and godlike reason
> To rust in us unused."

Such are the principal points of inquiry and investigation embraced in what may thus be properly called the *science of education;* since *science* is only a series of classified facts, with an exposition of their relations and combinations, and the principles which a careful and accurate induction evolves from them. I make no attempt to exhibit the facts themselves, but only their origin and foundation, the method by which they are to be classified, and the great need of a generalization of them, so as to afford the principles which may suggest the most effective *rules of art.* That special study and investigation are required to accomplish this, must be obvious to all, and that it is charlatanry to attempt to practice an art founded upon scientific principles so comprehensive and profound, without an adequate preparation —a preparation which in every other field of labor is always deemed indispensable. This fact, in theory at least, has been pretty fully recognized in this country. There are but few of the states and large cities in which no provision has been made for the special instruction of teachers by the establishment of normal schools. But the tendency in most of these institutions is to degenerate into mere academies, or high schools, because the course proper for normal instruction has not been clearly and specifically marked out. What should be studied in order to obtain a knowledge of the science of education, and the art of education? This question has not been definitely answered in the courses of study prescribed for these institutions, or for the normal departments of colleges.

There is much literature bearing upon this subject, of which a great deal is excellent; but, as yet, it cannot be said that any standard has been reached; and none will be, until practical educators take up the subject more earnestly, and work out the problem themselves.

Associative effort on the part of teachers will accomplish much. An association such as that to which you belong, wisely organized and directed, must prove a great power for good. On the other side of the Atlantic, much has been done in this direction. The College of Preceptors, of London, is a magnificent example of what can be accomplished by an association of educators. It examines teachers, and certifies their qualifications; and its diplomas are looked upon with the highest respect, and are growing in demand. It also publishes an influential journal.* The Educational Institute of Scotland, located at Edinburgh, is organized upon a similar basis.

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* "The College of Preceptors was established in the year 1846, and incorporated by Royal Charter in the year 1849, 'for the purpose of promoting sound learning and of advancing the interests of education, especially among the Middle Classes, by affording facilities to the teacher for acquiring a knowledge of his profession, and by providing for the periodical session of a competent Board of Examiners, to ascertain and give certificates of the requirements and fitness for their office of persons engaged or desiring to be engaged in the education of youth.' With this view, the Charter empowers the College to hold Examinations of Teachers and Schools and to grant Diplomas and Certificates to such persons as pass these Examinations satisfactorily. To effect these objects, two plans of examination have been established: (1) That of Teachers, to ascertain their qualifications and fitness to take part in the work of instruction; and (2) That of Pupils, to test their progress, and to afford at once to the Teacher and to the public a satisfactory criterion of the value of the instruction they receive.....At the present time more than 150 schools, in various parts of the country, are in union with this College, and from time to time send up candidates for examination..... The course of lectures (professional) for the present year comprises (1) Mental and Moral Science with reference to Education; (2) Practical Education and Methods of Teaching; (3) The History of Education." *College Circular* for 1877.

In many of the countries of Europe, great progress is making in the recognition of the science of education. At two of the four universities of Scotland—Edinburgh and St. Andrews, chairs of Education have been established; and this is also the case in the German universities.

It is in the power of the teachers of this country to hasten the time when their profession will receive the complete recognition which its character and peculiar value demand; for, without such recognition, teachers will never receive for their services the compensation which they deserve, and will always be at the dictation of those who are as ignorant of the principles and practical rules which pertain to the teacher's vocation, as they are positive and determined in the enforcement of their crude notions. It is entirely in the interest of your emancipation from such trammels that I have addressed you this afternoon, and I trust that what I have said may induce you not only to study more zealously the principles of your profession, but, in connection with this association, to labor earnestly to enlarge the sphere of its influence and to elevate it in the esteem of the community.

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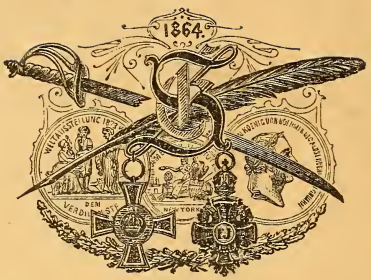

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